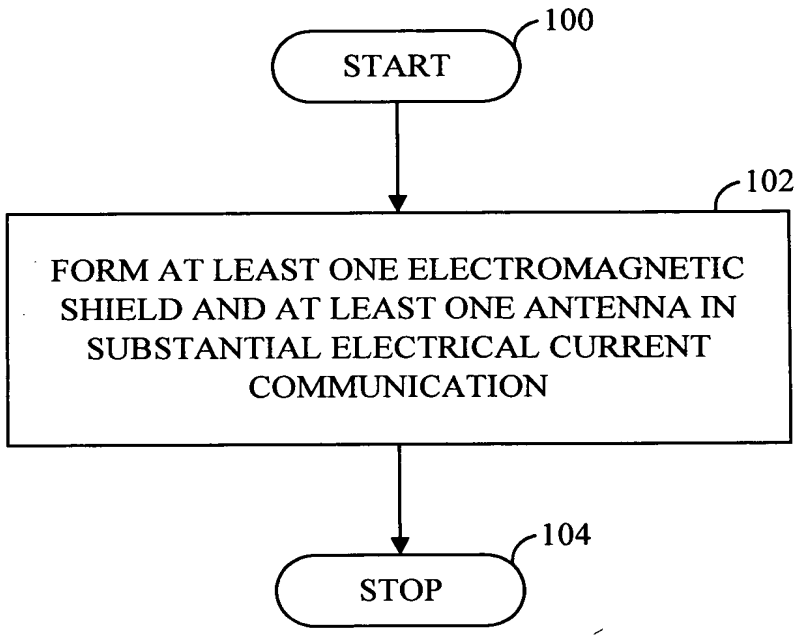

100
START
102
FORM AT LEAST ONE ELECTROMAGNETIC SHIELD AND AT LEAST ONE ANTENNA IN SUBSTANTIAL ELECTRICAL CURRENT COMMUNICATION
104
STOP

FIG. 1

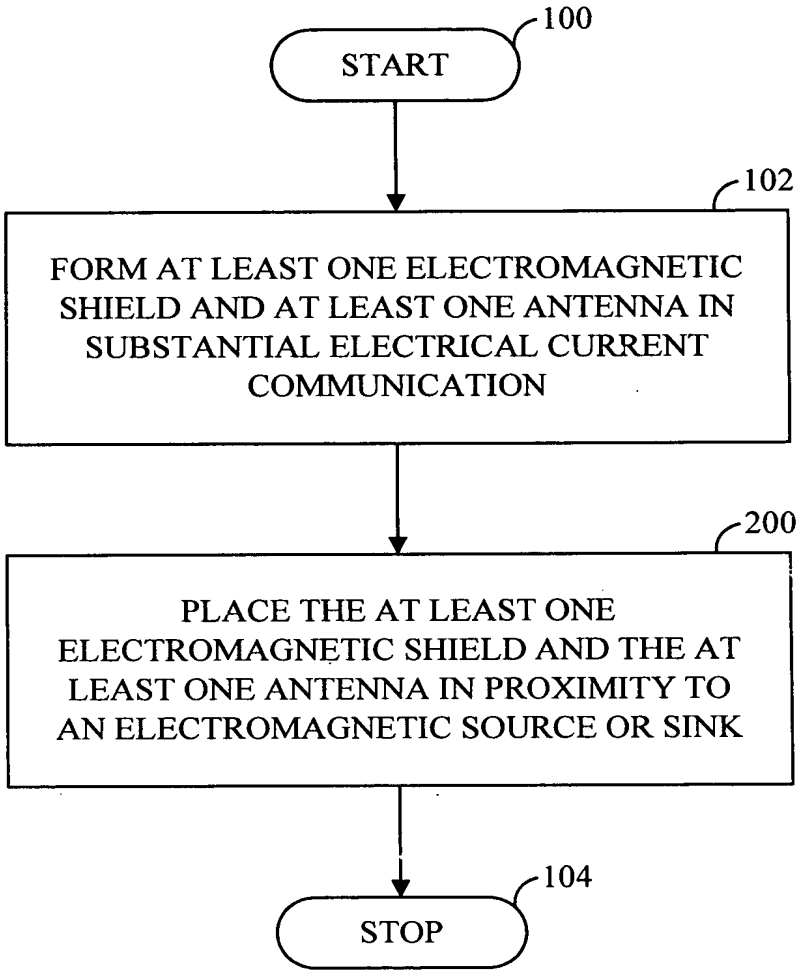

100
START
102
FORM AT LEAST ONE ELECTROMAGNETIC SHIELD AND AT LEAST ONE ANTENNA IN SUBSTANTIAL ELECTRICAL CURRENT COMMUNICATION
200
PLACE THE AT LEAST ONE ELECTROMAGNETIC SHIELD AND THE AT LEAST ONE ANTENNA IN PROXIMITY TO AN ELECTROMAGNETIC SOURCE OR SINK
104
STOP

FIG. 2

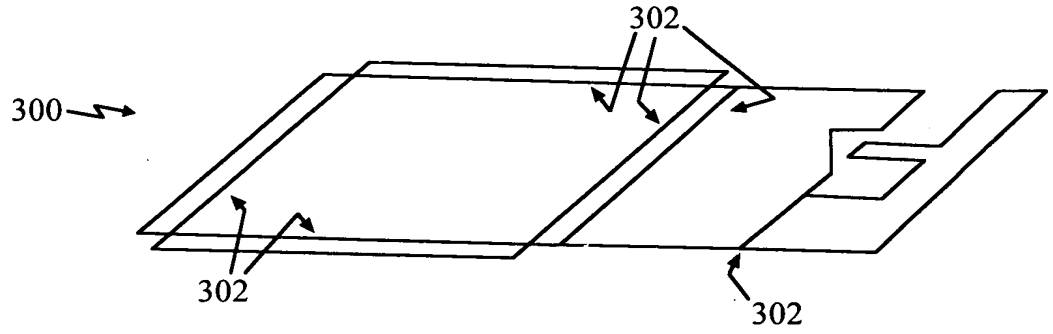


FIG. 3A

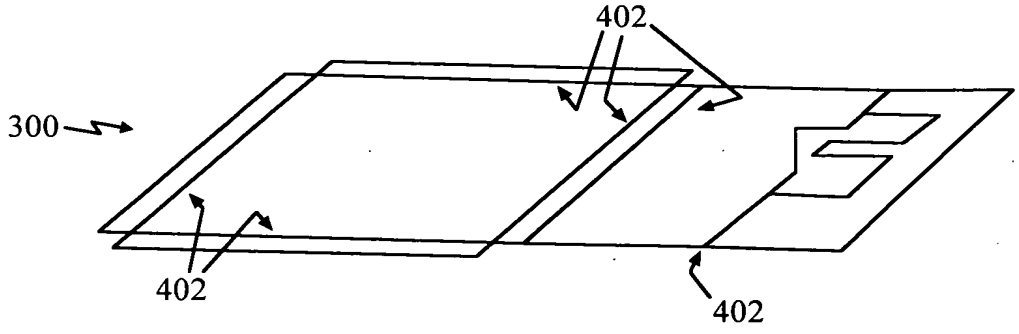


FIG. 4A

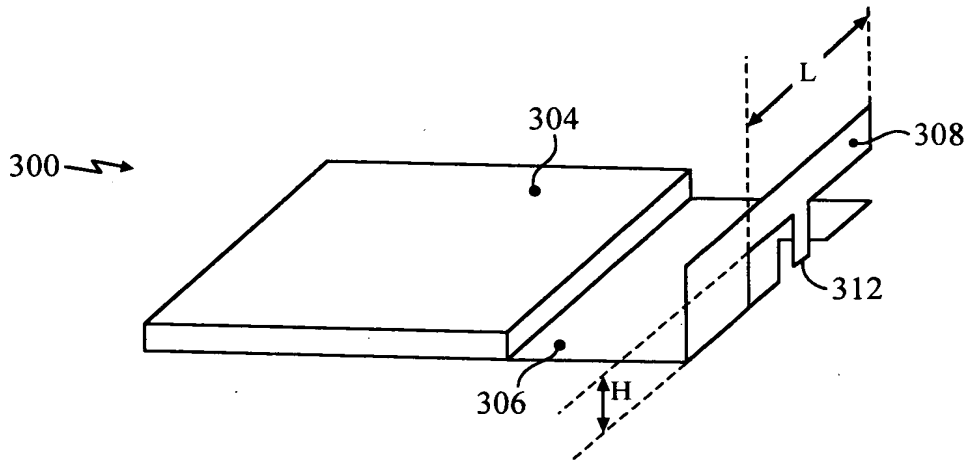


FIG. 3B

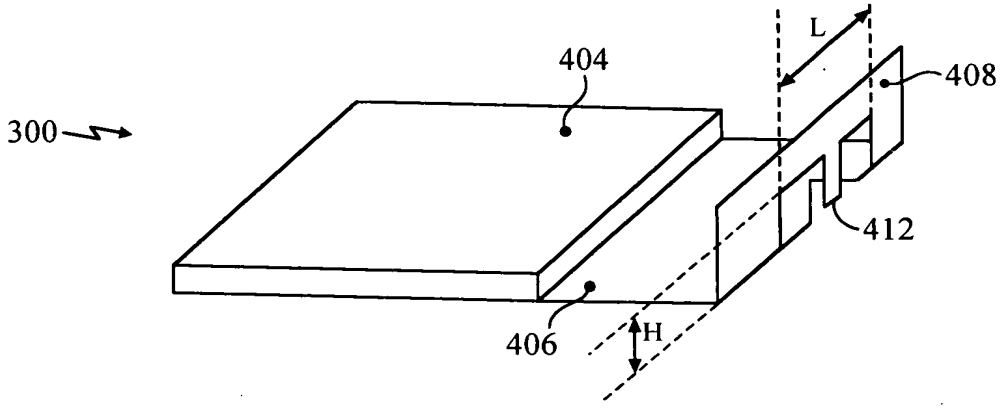


FIG. 4B

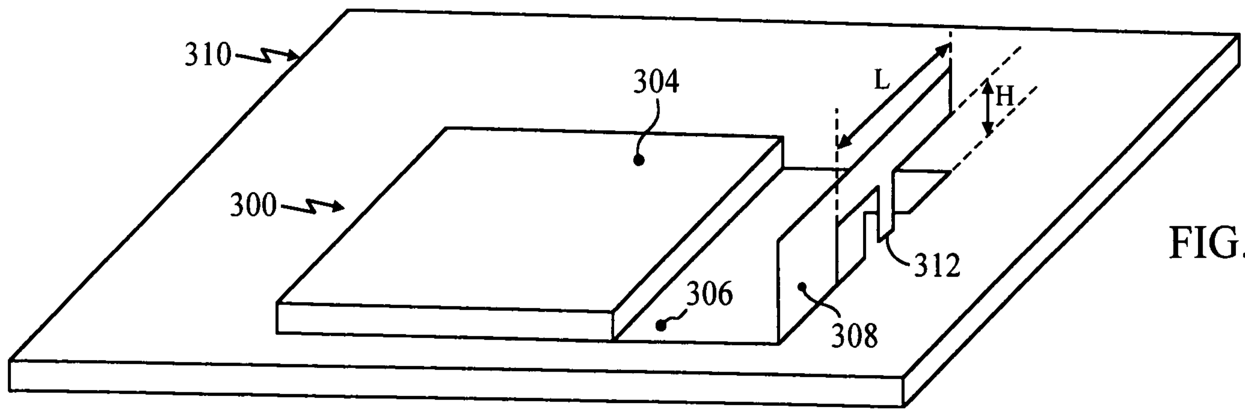


FIG. 3C

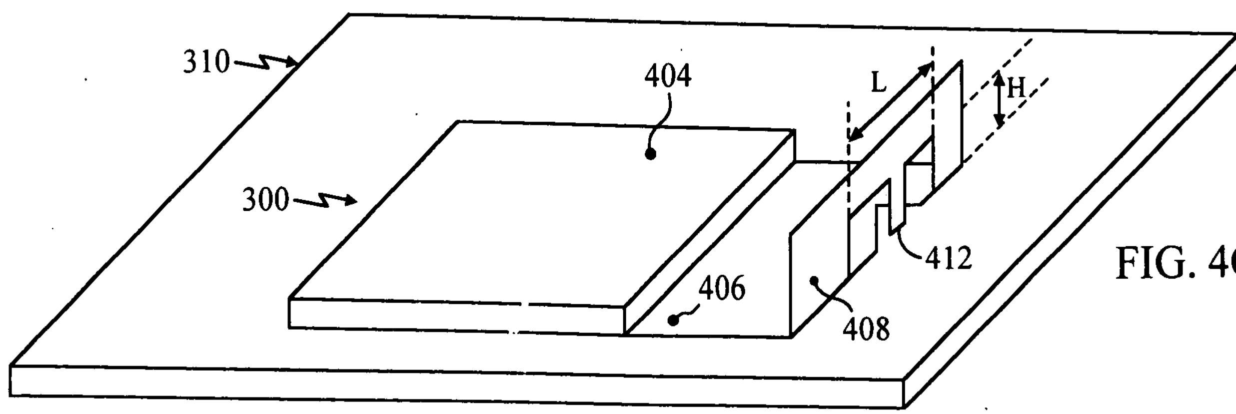
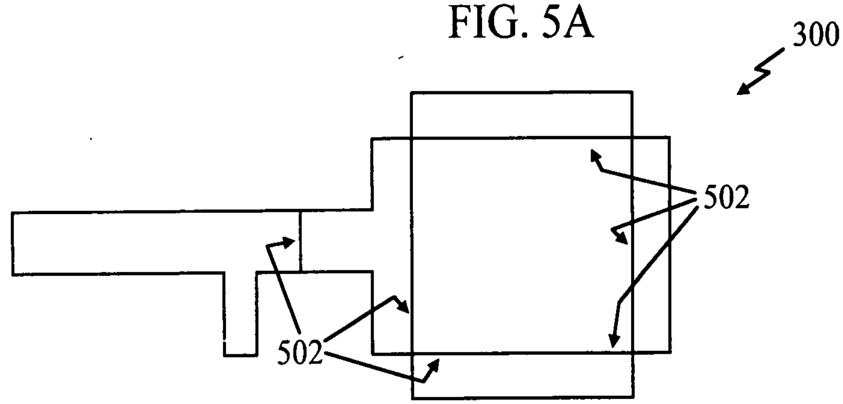


FIG. 4C

FIG. 5A



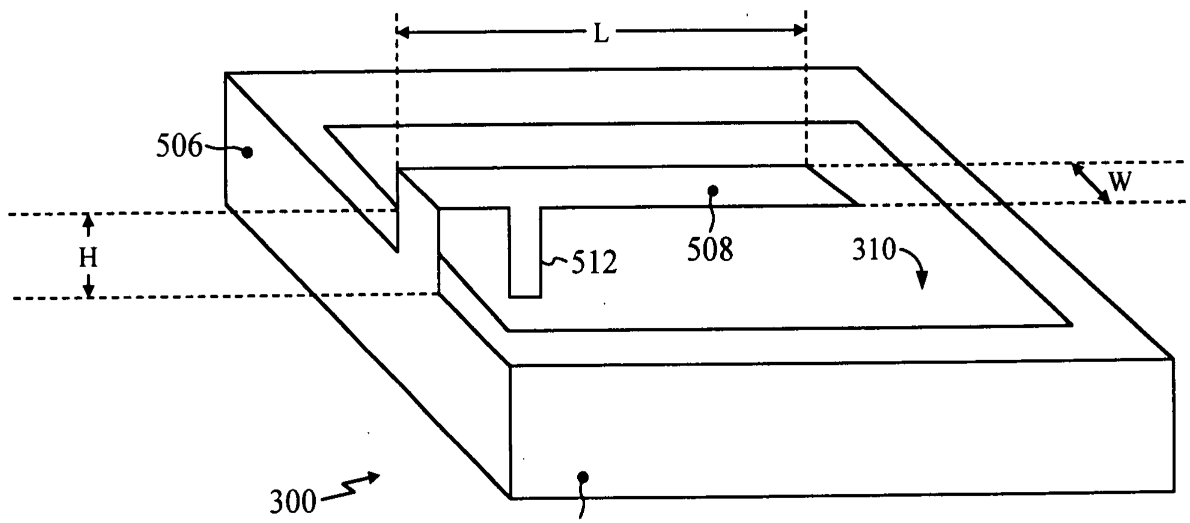


FIG. 5B

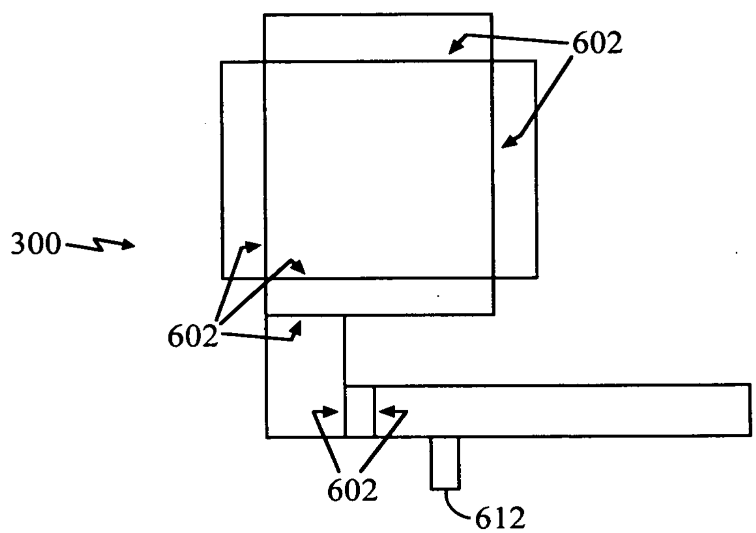


FIG. 6A

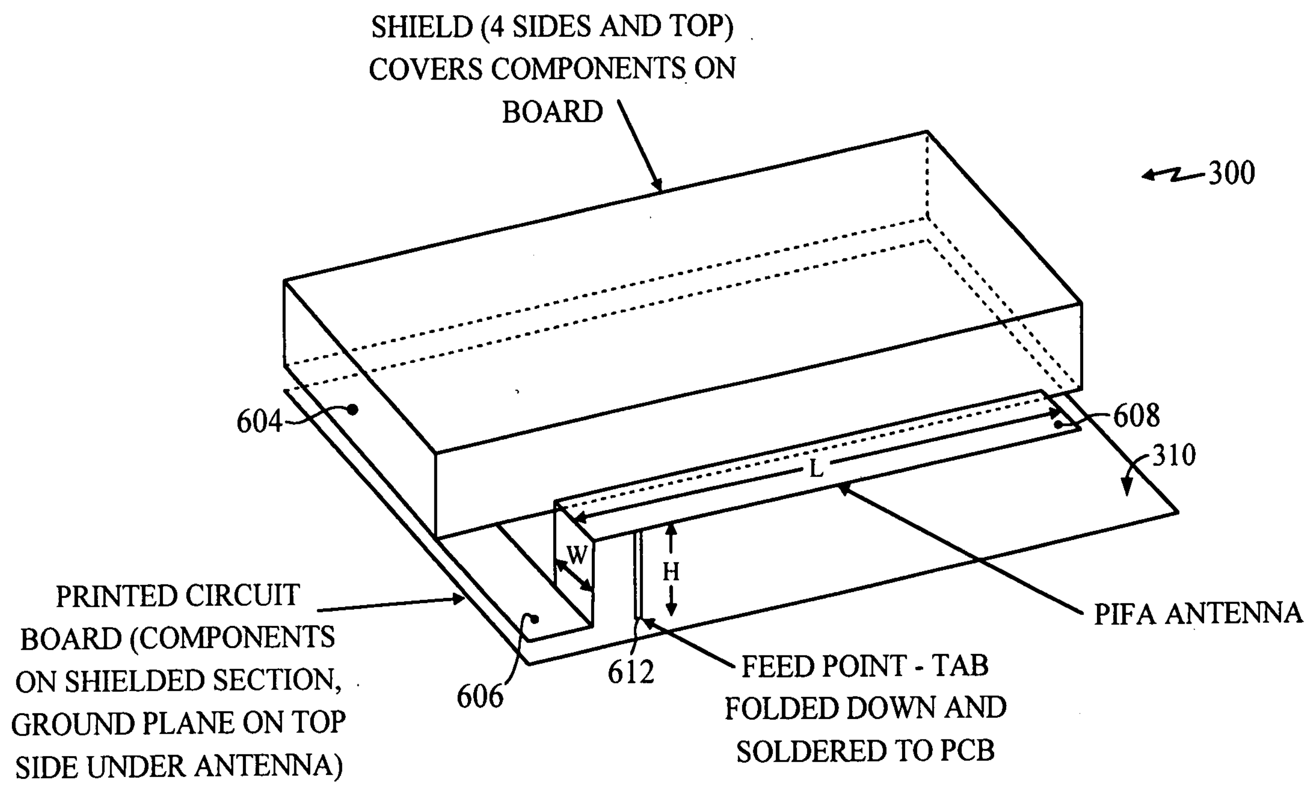

SHIELD (4 SIDES AND TOP) COVERS COMPONENTS ON BOARD
300
604
608
310
L
W
H
PRINTED CIRCUIT BOARD (COMPONENTS ON SHIELDED SECTION, GROUND PLANE ON TOP SIDE UNDER ANTENNA)
606
612
FEED POINT - TAB FOLDED DOWN AND SOLDERED TO PCB
PIFA ANTENNA

FIG. 6B

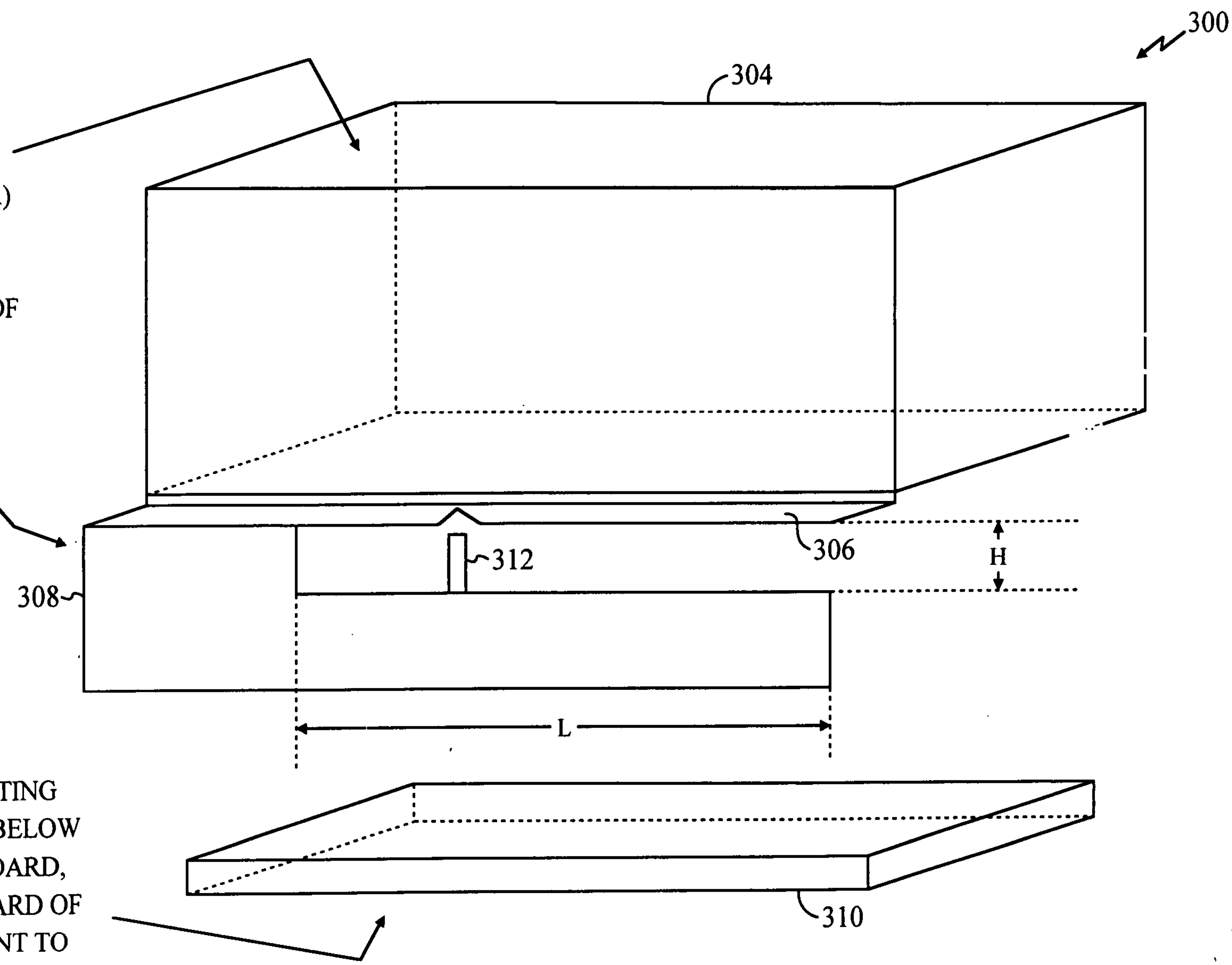
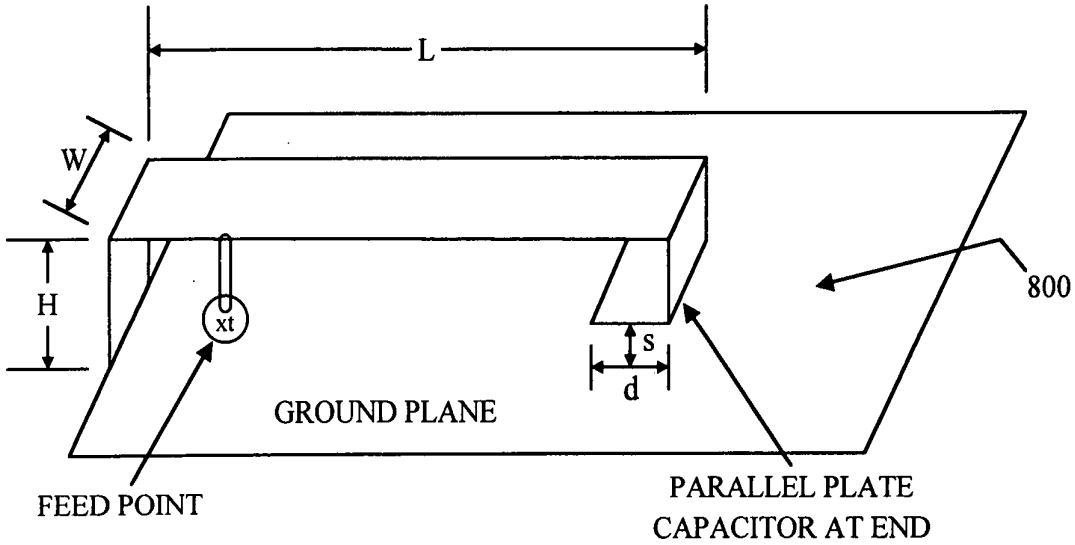

300
304
CAN (SHIELD) AND RADIATING ELEMENT (ANTENNA) FORMED FROM ON SUBSTANTIALLY CONTINUOUS PIECE OF MATERIAL
306
312
H
308
L
310
HERE, SINCE RADIATING ELEMENT RADIATES BELOW PRINTED CIRCUIT BOARD, PRINTED CIRCUIT BOARD OF MATERIAL SUFFICIENT TO ACT AS SHIELDING AND/OR HAS METAL LAYER

FIG. 7

PIFA WITH INTEGRAL CAPACITOR AT OPEN END



FREQUENCY DETERMINED PRIMARILY BY L AND CAPACITANCE
CAPACITANCE DETERMINED BY AREA Wxd AND HEIGHT ABOVE GROUND s
BANDWIDTH AND EFFICIENCY INFLUENCED BY L, W, AND H

FIG. 8